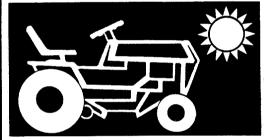
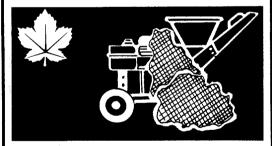
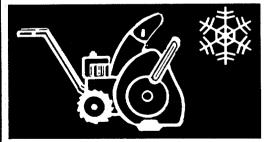
OWNER'S GUIDE

OUTDOOR POWER EQUIPMENT for all seasons









IMPORTANT:

Read Safety Rules and Instructions Carefully

REAR TINE TILLERS

Model Numbers 218-402-000 218-404-000 218-405-000

Thank you for purchasing an American-built product.

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Dear Customer,

So often throughout the year we are all in a rush to meet our daily obligations.

However, we at MTD Products Inc are taking a quick moment out to say...

"Thank you for your business."

Sincerely, MTD PRODUCTS INC



INSTRUCTIONS GIVEN WITH THIS SYMBOL ARE FOR PERSONAL SAFETY. BE SURE TO FOLLOW THEM.

LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

WARNING: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest engine authorized service center.



To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.

SAFE OPERATION PRACTICES FOR TILLERS

- It is suggested that this manual be read in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
- 2. Your tiller is a precision piece of power equipment, not a plaything. Therefore, exercise extreme caution at all times.
- 3. Read this Owner's Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
- Never allow children to operate a power tiller.
 Only persons well acquainted with these rules of safe operation should be allowed to use your tiller.
- No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
- 6. Keep the area of operation clear of all persons, particularly small children and pets.
- 7. Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
- 8. Do not wear loose fitting clothing that could get caught on the tiller.
- 9. Do not start the engine unless the shift lever is in the neutral (N) position.
- Do not stand in front of the tiller while starting the engine.
- 11. Do not place feet and hands on or near the tines when starting the engine or while the engine is running.
- 12. Never attempt to make a wheel or depth bar adjustment while the engine is running.
- 13. Do not leave the tiller unattended with the engine running.

- 14. Do not walk in front of the tiller while the engine is running.
- 15. Check the fuel before starting the engine. Gasoline is an extremely flammable fuel. Do not fill gasoline tank indoors, while the engine is running, or while the engine is still hot. Replace gasoline cap securely, and wipe off any spilled gasoline before starting the engine as it may cause a fire or explosion.
- 16. Do not run the engine while indoors. Exhaust gases are deadly poisonous.
- 17. Be careful not to touch the muffler after the engine has been running. It is hot.
- 18. Do not change the engine governor settings or overspeed the engine. Excessive engine speeds are dangerous.
- Before any maintenance work is performed or adjustments are made, remove the spark plug wire and ground it on the engine block for added safety.
- Use caution when tilling near buildings and fences. Rotating tines can cause damage or injury.
- 21. Before attempting to remove rocks, bricks and other objects from tines, stop the engine and be sure the tines have stopped completely. Disconnect the spark plug wire and ground to prevent accidental starting.
- 22. Check the tine and engine mounting bolts at frequent intervals for proper tightness.
- Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- 24. Never store the equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

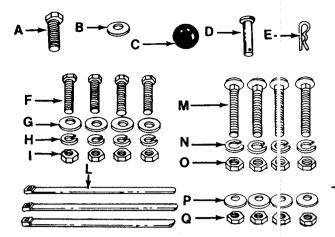


FIGURE 1.

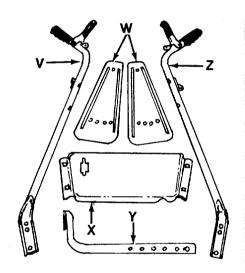


FIGURE 2.

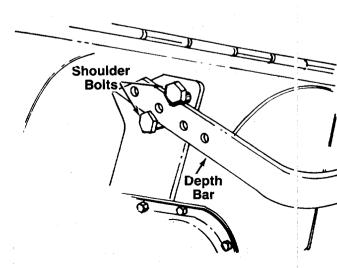


FIGURE 3.

ASSEMBLY



This unit is shipped WITHOUT GAS-OLINE or OIL. After assembly, see separate engine manual for proper fuel and engine oil recommendations.

Contents of Hardware Pack: (See Figure 1)

- A (1) Hex Bolt 3/8-16 x 3/4" Long
- B (1) Flat Washer 3/8" I.D.
- C (1) Ball Knob
- D (1) Clevis Pin
- E (1) Hairpin Cotter
- F (4) Hex Bolts 3/8-16 x 1.0" Long
- G (4) Belleville Washers 3/8" I.D.
- H (4) Lock Washers 3/8" I.D.
- I (4) Hex Nuts 3/8-16 Thread
- L (3) Cable Ties
- M (4) Carriage Bolts 5/16-18 x 1.75" Long
- N (4) Lock Washers 5/16" I.D.
- O (4) Hex Nuts 5/16-18 Thread
- P (4) Belleville Washers 5/16" I.D.
- Q (4) Hex Nuts 5/16-18 Thread
- R (1) Self-Tapping Screw (Not Shown)

←—Loose Parts in Carton: (See Figure 2)

- V (1) Handle-R.H.
- W (2) Side Shields
- X (1) Handle Panel
- Y (1) Depth Bar Assembly
- Z (1) Handle—L.H.

This owners manual covers various models of tillers. The units illustrated may vary from your unit. Follow the instructions which pertain to your unit.

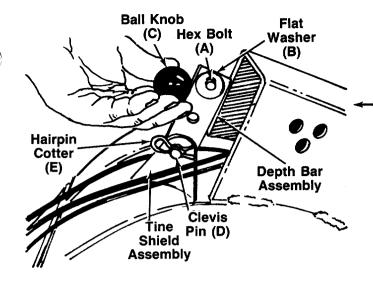
- Remove tiller, loose parts and hardware pack from carton. Make certain all parts and literature have been removed from the carton before the carton is discarded.
- Extend the control cables attached to the tiller and place on the floor. Be careful not to bend or kink the cables.

DEPTH BAR INSTALLATION

 Raise the tine shield hinge flap assembly. Insert the depth bar assembly (Y) between the two shoulder bolts and up through the tine shield —assembly as shown in figure 3.

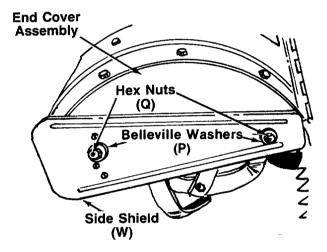


For clarity, figure 3 was taken with tiller raised on end. It is not necessary to raise the tiller.



- Insert clevis pin (D) through the tine shield and depth bar assemblies. Secure with hairpin cotter—(E). See figure 4.
- 3. Insert hex bolt (A) into the upper hole of the depth bar assembly. Place flat washer (B) onto the hex bolt and thread ball knob (C) onto the hex bolt. See figure 4. Tighten securely.

FIGURE 4.



SIDE SHIELD INSTALLATION

Mount side shields (W) over the weld bolts on the end cover assemblies. Secure with belleville washers (P)—and hex nuts (Q). See figure 5.

FIGURE 5.

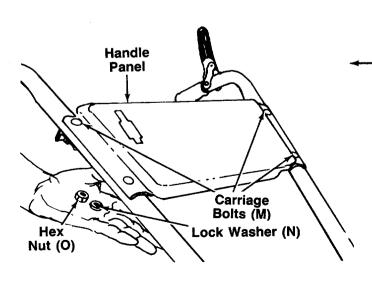


FIGURE 6.

HANDLE ASSEMBLY

Attach the handle panel to the handles using carrige bolts (M), lock washer (W) and hex nuts (O).
 See figure 6. Do not tighten.



To align the holes in the handle panel and the handle, it may be necessary to loosen the cable brackets which are mounted to the back of the handles with self-tapping screws.



On Models 402 and 404, handle height is determined by the three mounting holes in the handle mounting bracket. Refer to the adjustment section in your owner's manual.

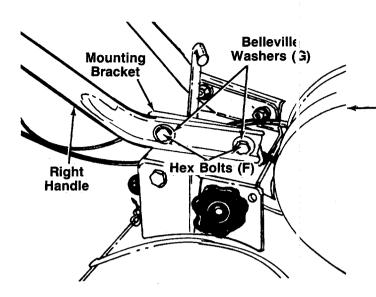


FIGURE 7-Model 405 Shown.

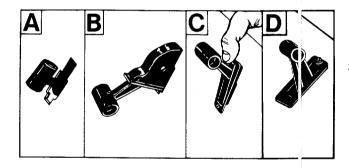


FIGURE 8.

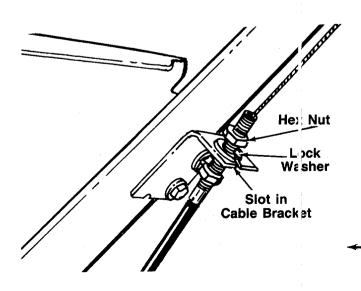


FIGURE 9.

- Place handle assembly in position on the tiller.
 Working on one side of the unit, insert one hex bolt
 (F) through belleville washer (G) (crowned side of
 washer goes against head of bolt), then through
 bottom hole of handle and handle mounting
 bracket. Secure loosely with lock washer (H) and
 —hex nut (I). See figure 7.
- Align the other side of the handle with the handle mounting bracket. It may be necessary to use force to spring the handle over the handle mounting bracket. Secure loosely with hex bolt, belleville washer, lock washer and hex nut.
- 4. Secure upper hole in handle to handle mounting bracket (both sides) in the same manner.
- Tighten securely all four nuts and bolts which secure the handles to the handle mounting brackets. Then tighten the four nuts at the handle panel.

THROTTLE CONTROL INSTALLATION

Assemble the throttle control to the handle panel as follows.

- Hold the throttle control assembly beneath the handle panel. Turn the control sideways and insert the lever up through the wide portion of the slot on the handle panel. See figure 8A.
- 2. After the end of the lever is through the slot, turn and then tip the control forward as shown in figure 8B to slide it through the slot.



The lever must be all the way to the back of the control housing as shown in figure 8B.

- 3. Push the control back into the slot in the handle panel and press in place. Be certain the control is locked securely into the slot.
- 4. Secure the throttle control to the handle panel using the self-tapping screw (R). See figure 8D.

ATTACHING THE CLUTCH CONTROL CABLES

The drive clutch and tine clutch control cables are already attached to the unit. There is a tag attached to the drive clutch cable (cable which appears to be shorter). This cable attaches to the right handle.



Both the drive clutch cable and the tine clutch cable are attached to springs, which are hooked to weld bolts as shown in figure 9. If either the cable or spring has come loose in shipping, it must be reassembled. Refer to page 18, reference numbers 1, 2, 89 and 98.

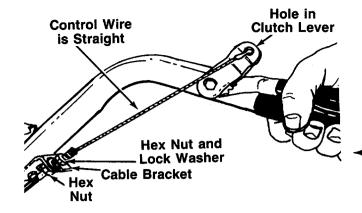


FIGURE 10.

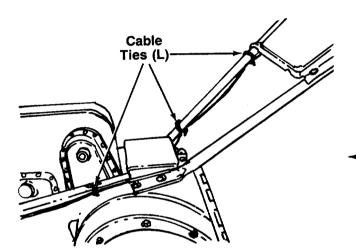


FIGURE 11.

- Remove one nut and the lock washer from the end of the drive clutch cable (short cable). Slip the cable up through the slot on the cable bracket on the right handle. Rethread hex nut and lock washer on the end of the cable. See figure 9. Do not tighten at this time.
- 2. Hook the "Z" end of drive clutch cable into the hole in drive clutch lever.
- -3. With the clutch lever released (in the "up" position), adjust the bottom nut at the cable bracket so there is only a slight amount of slack in the control wire. Tighten the upper nut against the bracket. Squeeze the clutch lever against the handle. The control wire should now be straight. See figure 10.



Do not overtighten control wire. Too much tension may cause it to break.

- 4. Attach the tine clutch cable (cable which appears to be longer) to the tine clutch lever on the left handle in the same manner as the drive clutch cable.
- Secure all the cables to the right handle as shown in figure 11 with cable ties (L). In addition, secure the throttle cable directly to the tiller frame with cable tie.

CONTROLS—Location and Use

Throttle Control

The throttle control lever is located on the right hand side of handle panel and controls the engine speed. See figure 12.

- 1. Start—Push throttle control lever forward (down) to start position.
- 2. Stop—Pull lever back (upward) to stop the engine.

Tine Clutch Lever

The tine clutch lever is located on the left handle. See figure 12.

Squeeze the lever down to engage the tines. Release the lever to disengage the tines.

Drive Clutch Lever

The drive clutch lever is located on the right handle. See figure 12.

Squeeze the lever down to engage the wheels. Release the lever to disengage the wheels.

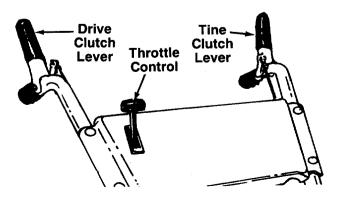


FIGURE 12.

OPERATION



Engine is shipped without oil.

BEFORE STARTING

1. Before operating tiller for the first time or if tines have been removed and reassembled or any reason, check to be certain the tines are assembled correctly. The sharp edge of the tines must enter the soil first as shown in figure 13. (Figure 14 illustrates the left hand tines, viewed from the left hand side of the tiller. Right hand tines rotate in the same direction as the left hand tines.)

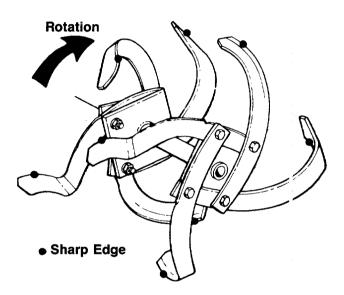


FIGURE 13.

- 2. Fill crankcase with oil as instructed in the separate engine manual packed with your unit.
- 3. Fill fuel tank with clean, fresh, lead-free, lcw-lead or regular grade leaded gasoline.

TO START ENGINE



BE SURE NO ONE IS STANDING III FRONT OF THE TILLER WHILE THE ENGINE IS RUNNING OR BEING STARTED.

- 1. Place the throttle control lever in START position.
- 2. Move choke lever to CHOKE position.



A warm engine may not require choking.

- 3. Stand at side of tiller. Grasp the starter handle and pull out rapidly. Return it slowly to the engine. Repeat as necessary.
- 4. After engine starts, move choke lever gradually to OFF position.

Refer to engine manual for additional engine information.

TO STOP ENGINE

- 1. Move throttle control to OFF position.
- Disconnect spark plug wire and ground to prevent accidentally starting while equipment is unattended.

HOW TO USE YOUR TILLER



When operating the tiller for the first time, use the depth bar setting that gives 1½ inches of tilling depth (second hole from the top). Refer to figure 14. Use slow speed only.

Tilling depth is controlled by the depth bar which can be adjusted to five different settings. See figure 14. Adjust the side shields as shown in figure 15, as you adjust the depth bar. Be certain spark plug wire is disconnected and grounded against the engine.

1. When using the tiller for the first time, use the second adjustment hole from the top (11/2" of tilling depth). See figure 14.

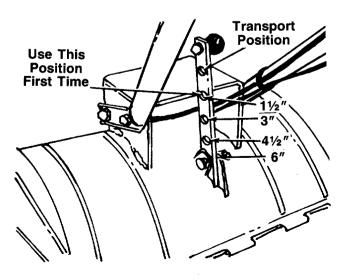
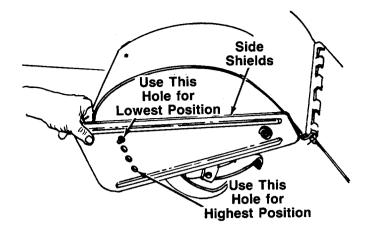


FIGURE 14.



WARNING

Do not push down on the handles so that the wheels are lifted off the ground while the tine clutch is engaged, or the tiller could move backward and cause personal injury.

For best results, it is recommended the garden be tilled twice (lengthwise, then widthwise) to pulverize the soil.

FIGURE 15.

- 2. When breaking up sod and for shallow cultivation, use the setting which gives 1½" of tilling depth (second hole from the top). Place the side shields in their lowest position. For further depth, raise the depth bar and side shields and make one or two more passes over the area.
- When tilling loose soil, depth bar may be raised to its highest position (use bottom adjustment hole) to give the deepest tilling depth. Raise the side shields to their highest position.
- 4. To transport tiller, lower the depth bar (use top adiustment hole).

To adjust the depth bar, remove the clevis pin and hairpin cotter. See figure 14. Move the depth bar to the desired setting.

To adjust the side shields, remove the hex nut and belleville washer from the front and loosen the rear nut. See figure 15. Pivot the side shield to the desired position. Replace hex nut and belleville washer. Tighten securely.

To operate the tiller:

- 1. Select the depth bar setting.
- 2. Start engine as instructed on page 8.
- 3. Engage drive and tine clutch levers.



Engage wheel drive before engaging the tine clutch lever.



To transport tiller, **do not** engage the tine clutch lever. Engage the wheels only.

ADJUSTMENTS

HANDLE ADJUSTMENT (Models 402 and 404)

The handle may be adjusted to one of three height positions. See figure 16. To adjust the handle:

- 1. Loosen the bolts on the ends of the handle.
- 2. Remove the hex bolts from the handle which are closest to the operator.
- 3. Pivot the handle to the desired position and replace the hardware. Tighten securely.

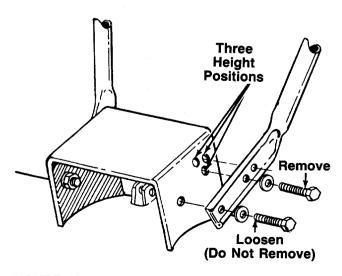


FIGURE 16.

HANDLE ADJUSTMENT (Model 405)

The handle may be placed in one of nine different positions. The handle may be adjusted to one of three height positions, and also may be adjusted to be no line with the tiller, or swung to the left or right so the operator is not walking in the freshly tilled soil.

To adjust the handle height, remove the hand knob and locking pin shown in figure 17. Select one of the three adjustment holes and reassemble.

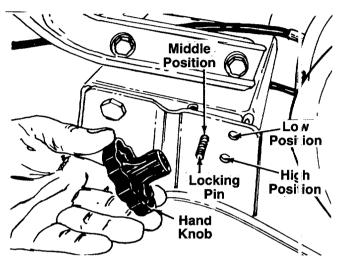


FIGURE 17. Model 405 Only

To adjust the handle position from side to side, Icosen the adjustment handle by turning it counterclockwise several turns. Pull the adjustment handle backward and pivot the tiller handle to desired position. Release and tighten the adjustment handle. See figure 18.

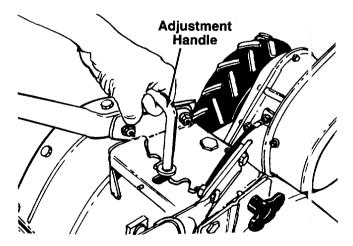


FIGURE 18. Model 405 Only

BELT TENSION ADJUSTMENT—Drive and Tine Clutches

Periodic adjustment of the belt tension may be required due to normal stretch and wear on the belt. Adjust ment is needed if the tines seem to hesitate while tilling, but the engine maintains the same speed.

To adjust, loosen the hex nuts at the cable bracket on the handle. See figure 19. With the clutch lever released as shown in figure 12, adjust the bottom nut so that there is only a slight amount of slack in the control wire. Tighten the upper nut against the bracket.



Do not overtighten control wire. Too much tension may cause it to break.

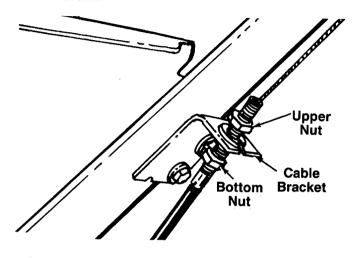


FIGURE 19.

CARBURETOR ADJUSTMENT



If any adjustments are made to the engine while the engine is running, (e.g. carburetor), disengage all clutches and tines. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Never make unnecessary adjustments. The factory settings are correct for most applications. If adjustments are needed, refer to the separate engine manual packed with your tiller.

LUBRICATION

Chain Cases—The chain cases are pre-lubricated and sealed at the factory. They require no checking unless the chain cases are disassembled. To fill with grease, lay the left half of the chain case on its side. Add 12 ounces of plastilube #0 grease to the tine chain case or 10 ounces to the wheel chain case. Assemble the right half to it. This grease can be obtained at your nearest authorized dealer. Order part number 737-0133.

Wheels—Lubricate the wheel bearings with a light oil after each fifteen hours of operation.

Wheel Drive—The wheels are driven by pawl and ratchet drive. Lubricate the pawl and ratchet at least twice a season with a silicone type lubricant.

Figure 20 shows the left hub cap. To take off the hub caps, remove the two hex nuts and lock washers on the inside of the wheel. Remove the hub cap. A cotter pin holds the ratchet in place. The pawls must pivot freely. Clean with a solvent, replace any broken or worn parts, and lubricate.

The pawls and ratchet on the hub cap are assembled facing the opposite way.

After reassembling, test the operation of the drive without the engine running. Engage the drive clutch (on the right handle) and pull the tiller backwards. Both wheels should lock. Push the tiller forward and both wheels should rotate.



The wheels will "click" when the tiller is pushed forward.

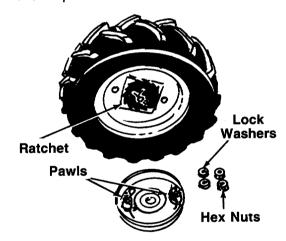


FIGURE 20.

Tine and Wheel Drive Controls—Lubricate the pivot points on the clutch levers and the cables at least once a season with light oil. The controls must operate freely in both directions.

Pivot Points—Lubricate all pivot points and linkages at least once a season with light oil.

MAINTENANCE



Disconnect the spark plug wire and ground it against the engine before performing any repairs or maintenance.



If for any reason the tines are removed from the tiller, be certain the tines are reassembled so that the sharp edge of the tines enter the soil first. Refer to item number one under "Operation."

ENGINE

Refer to the separate engine manual for engine maintenance instructions.

Maintain **engine oil** as instruted in the separate engine manual packed with your unit. Read and follow instructions carefully.

Service air cleaner every ten hours under normal conditions. Clean every hour under extremely dusty conditions. Poor engine performance and flooding usually indicates that the air cleaner should be serviced. To service the air cleaner, refer to the separate engine manual packed with your unit.

IMPORTANT: Never run your engine without air cleaner completely assembled.

The **spark plug** should be cleaned and the gap reset every 25 hours of engine operation. Spark plug replacement is recommended at the start of each tilling season; check engine manual for correct plug type and gap specification.

Clean the engine regularly with a cloth or brush. Keep the cooling system (blower housing area) clean to permit proper air circulation which is essential to engine performance and life. Be certain to remove all dirt and combustible debris from muffler area.

CLEANING THE TINE AREA

Clean the underside of the tine shield after each use. The dirt washes off the tines easier if washed off immediately instead of after it dries.

BELT REPLACEMENT



Do not use an off-the-shelf belt.

Your tiller has been engineered with belts made of special material (Kevlar Tensile) for longer life and better performance. They should not be replaced with an off-the-shelf belt.

If belt replacement is required, order belt or belts by part number from your nearest authorized dealer.

Drive Belt—Part Nos. 754-0109 (404, 405)

754-0207 (402)

Tine Belt—Part No. 754-0195

Tine (Long) Belt Removal

1. Remove belt cover by removing the four self-tapping screws. See figure 21.

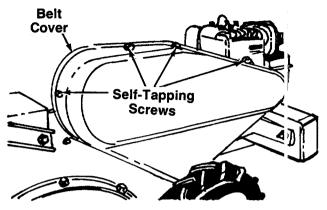


FIGURE 21.

- 2. Lift the belt from under the flat idler pulle *y*. See figure 22.
- 3. Remove the wire belt guard. See figure 22.

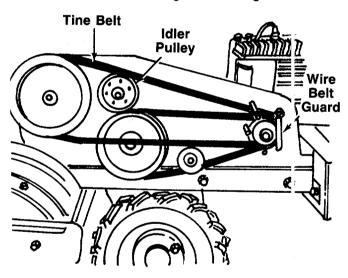


FIGURE 22.

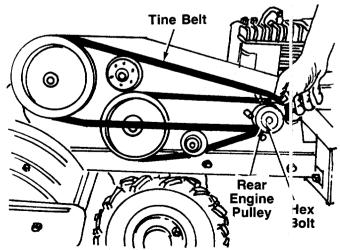


FIGURE 23.

- 4. Loosen, but do not remove, the hex bolt on the rear engine pulley. See figure 23.
- Slip the engine pulley out until belt can be removed.
- 6. Install new belt.

Drive (Short) Belt Removal

- 1. Remove the tine belt as instructed in the previous section.
- 2. Remove the hex bolt, lock washer and flat washer from the rear engine pulley. See figure 23. Slip the rear engine pulley off the engine.
- 3. Loosen the two set screws on the front engine pulley. See figure 24.



Do not lose the square key on the engine shaft.

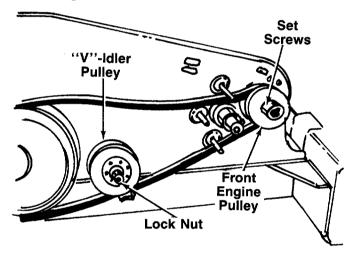


FIGURE 24.

- 4. Remove the lock nut on the "V"-idler pulley. See figure 24.
- 5. Slide the front engine pulley and "V"-idler pulley out as shown in figure 25.

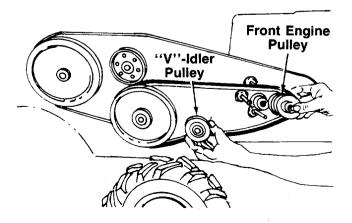


FIGURE 25.

6. Remove the belt and install the new belt. Be sure the belt is routed around the guide pins as shown in figure 26.



Belt must be between the "V"-idler pulley and the idler bracket. See figure 26.

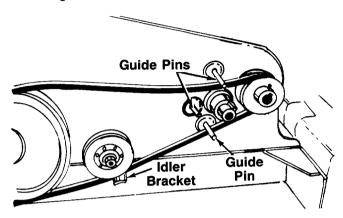


FIGURE 26.



Upon reassembly, refer to illustration on page 18 for correct assembly of wire belt guard for your model tiller.

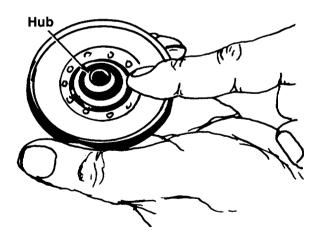


FIGURE 27.



If the "V"-idler or flat idler pulleys are removed for any reason, be sure to install with hub side against the idler bracket. See figure 27.

OFF-SEASON STORAGE

If the tiller will not be used for a period longer than 30 days, the following steps should be taken to prepare the tiller for storage.

- 1. Clean the exterior of engine and the entire tiller thoroughly. Lubricate the tiller as described in the lubrication instructions.
- 2. Refer to the engine manual for correct engine storage instructions.
- 3. Wipe tines with oiled rag to prevent rust.
- 4. Store tiller in a clean, dry area.



When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially any springs, bearings and cables.

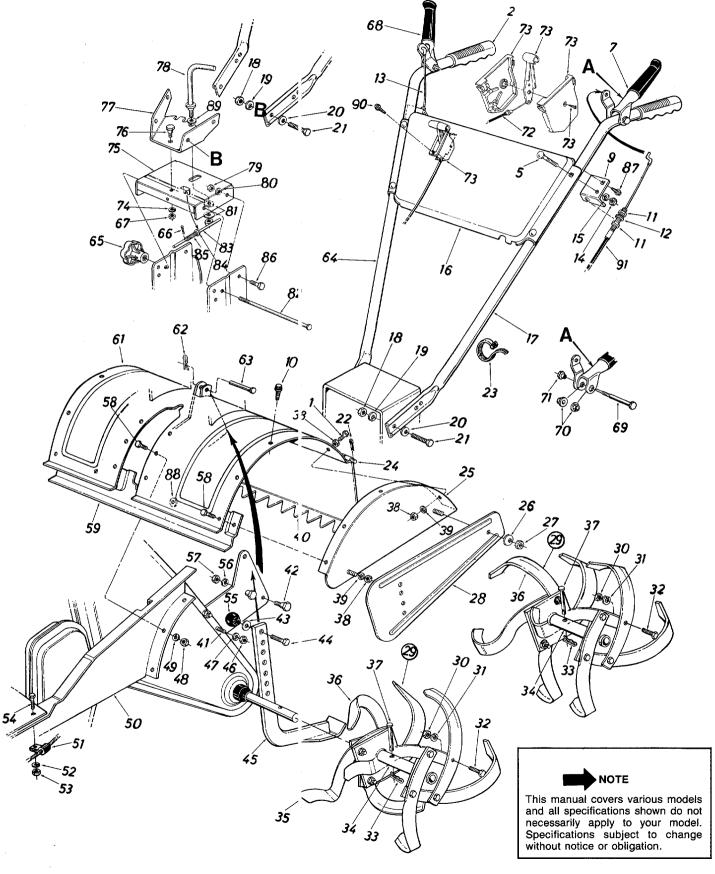
TROUBLE SHOOTING CHART

SYMPTOM	POSSIBLE CAUSE(S)	SOLUTION
Engine fails to start	Check fuel tank for gas. Spark plug lead wire disconnected.	Fill tank if empty. Connect lead wire.
·	3. Faulty spark plug.	3. Clean, adjust gap or replace.
Hard starting or loss of power	Spark plug vire loose.	Connect and tighten spark plug wire
	2. Dirty air cleaner.	Clean air cleaner as described in engine manual.
Engine overheats	Carburetor r ot adjusted properly.	Adjust carburetor. See engine manual.
	2. Air flow rest icted.	Remove blower housing and clean as described in the engine manual.
	3. Engine oil level low.	3. Fill crankcase with the proper oil.
Controls do not engage	Belts worn and or stretched.	Make control cable adjustment (see adjustment section) or replace belt.

NOTE: For repairs beyond the minor adjustments listed above, please contact your local service dealer.

NOTES

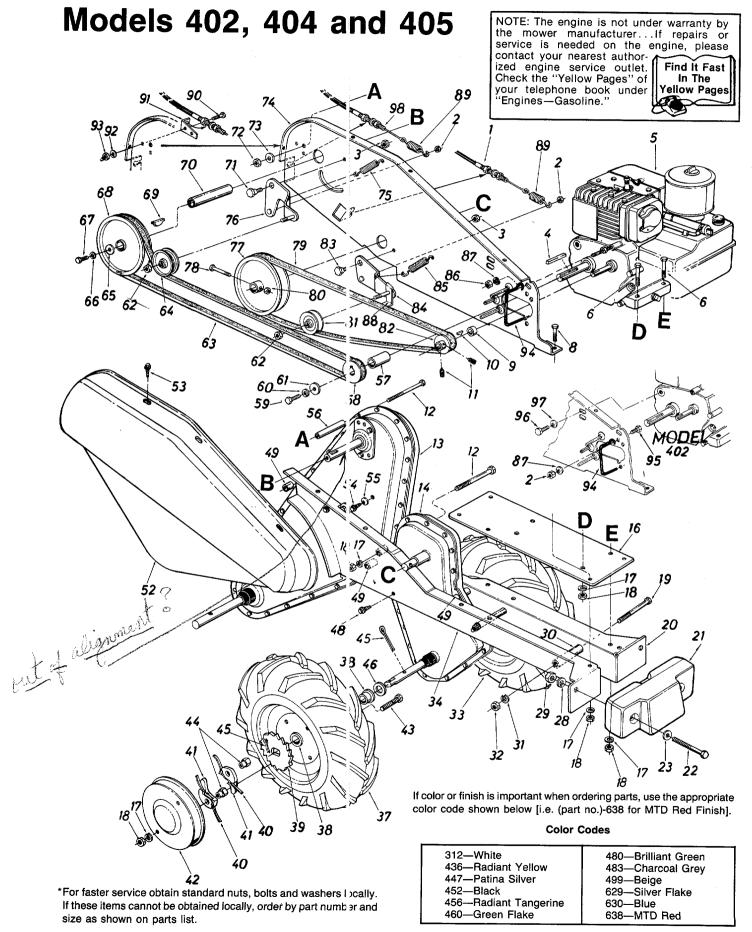
Models 402, 404 and 405



Models 402, 404 and 405

PARTS LIST FOR MODELS 402, 404 AND 405 ROTARY TILLERS

	PARTS LIST FOR MODELS 402, 404 AND 405 HOTARY TILLERS									
-	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART		PART NO.	COLOR CODE	DESCRIPTION	NEW PART
	1	710-0528		Hex Bolt 5/16-18 x 11/4" Lg.*		51	726-0175		Clamp 5/16" Dia.	
	2	720-0180		Grip		52	736-0119		L-Wash. 5/16" I.D.*	
	5	710-0458		Carr. Bolt 5/16-18 x 1.75" *		53	712-0267		Hex Nut 5/16-18 Thd.*	
	7	784-0031		Clutch Grip Ass'y.—L.H.		54	710-0118		Hex Bolt 5/16-18 x 3/4" Lg.*	
				(Tines)		55	720-0165		Ball Knob 11/4" Dia.	
	9	15093		Clutch Cable Bracket		56	736-0169		L-Wash. 3/8" I.D.*	
	10	710-0607		Hex Wash. S-Tap Scr.		57	712-0798		Hex Nut 3/8-16 Thd.*	
				5/16-18 x .62" Lg.		58	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	
	11	712-0256		Hex Nut 5/16-24 Thd.		59	15393		Brkt. Reinforcement (404, 405)	1
	12	736-0119		L-Wash. 5/16" I.D.*			784-0087		Brkt. Reinforcement (402)	
1	13	746-0484		Wheel Drive Cable	ļ	60	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	1
	14	712-0267		Hex Nut 5/16-18 Thd.*		61	784-0026		Tine Shield Ass'y. (405)	
	15	736-0119		L-Wash. 5/16" I.D.*			14987		Tine Shield Ass'y. (404)	
	16	784-0036		Handle Panel			784-0085		Tine Shield Ass'y. (402)	
	17	749-0639		Handle-L.H. (402, 404)		62	714-0149		Hairpin Cotter	
		749-0637		HandleL.H. (405)		63	711-0415	1	Clevis Pin 3/8" Dia.	
	18	712-0798		Hex Nut 3/8-16 Thd.*		64	749-0762		Handle—R.H. (405)	
	19	736-0169		L-Wash. 3/8" I.D.*			749-0763	1	HandleR.H. (402, 404)	
	20	736-0105		Bell-Wash. 3/8" I.D.		65	720-0195		Hand Knob (405)	
	21	710-0253		Hex Bolt 3/8-16 x 1.00" Lg.*		66	714-0127		Cotter Pin 1/16" Dia. x .75"	
	22	714-0507		Cotter Pin 3/32" Dia. x 3/4" *					Lg.* (405)	
	23	725-0157		Cable Tie		67	712-0375		Hex Cent. L-Nut 3/8-16 Thd.	
	24	747-0432		Tiller Flap Rod (404, 405)					(405)	
		747-0501		Tiller Flap Rod (402)		68	784-0270		Clutch Grip Ass'y.—R.H.	
	25	14989		End Cover Ass'y.—L.H.					(Wheels)	
		14990		End Cover Ass'y.—R.H.		69	738-0560		Shoulder Bolt .38" Dia. x	
				(Not Shown)					1.53" Lg.	
ł	26	736-0242		Bell-Wash. 5/16" I.D.		70	741-0402	1	Hex Flange Plastic Bearing	
	27	712-0267		Hex Nut 5/16-18 Thd.*		71	738-0561		Shoulder Nut 1/4-20 Thd.	
	28	15390	638	Side Shield		72	746-0502		Throttle Control Wire (404,	
	29	15397		L.H. Tine Ass'y. Comp.			740 0540		405)	
				(404, 405)			746-0512		Throttle Control Wire (402)	1
		15398		R.H. Tine Ass'y. Comp.		73	831-0823		Throttle Control Box Ass'y.	
				(404, 405) (Not Shown)		74	736-0219		Bell-Wash40" I.D. (405)	
		784-0083		L.H. Tine Ass'y. Comp. (402)		75	784-0022		Handle Pivot Bracket (405)	
		784-0082		R.H. Tine Ass'y. Comp. (402)		76	738-0281		Shoulder Bolt (405)	
				(Not Shown)		77	784-0019		Handle Mtg. Bracket (405)	
	30	712-0241		Hex Nut 3/8-24 Thd.*		78	784-0025		Adj. Handle Ass'y. (405)	
	31	736-0169		L-Wash. 3/8" I.D.*		79	712-0375	'	Hex Cent. L-Nut 3/8-16 Thd.	
	32	710-0191		Hex Bolt 3/8-24 x 1.25" Lg.*		00	700 0105	.]	(405)	
	33	714-0149	'	Hairpin Cotter		80	736-0105	'	Bell-Wash40" I.D. x .88"	
	34	14978		Tine Adapter Ass'y. (404, 405)		01	726 0252	,	O.D. (405)	
		784-0084		Tine Adapter Ass'y. (402)		81	736-0253	'	Bell-Wash. ½" I.D. x 1.00" O.D. (405)	
	35	742-0106		Tine 12" R.H.		00	711-0765		Lock Pin 5/16" Dia. x 8" (405)	
	36	742-0105	1	Tine 12" L.H.		82	784-0023			
	37	711-0415		Clevis Pin 3/8" Dia.		83	736-0463		Lower Sliding Ass'y. (405) FI-Wash291" I.D. x .62"	ŀ
	38	712-0267		Hex Nut 5/16-18 Thd.*		04	730-0403	<u>'</u>		
	39	736-0119	' .	L-Wash. 5/16" I.D.*		0.5	722 0145		O.D. (405) Compression Spring .36"	
	40	14979		Tine Shield Flap (404, 405)		85	732-0145	'		
	44	784-0088		Tine Shield Flap (402)		96	738-0147	,	O.D. x 1.00" Lg. (405) Shoulder Bolt ½" Dia. x	
	41	710-0736		Hex Bolt 5/16-18 x 1.0" Lg.* Shld. Bolt ½" Dia. x .426"		86	/30-014/		.170" Lg. (405)	
	42	738-0507				07	710 0500		Hex Wash. S-Tap Scr. ¼-20	
	43	736-0117		FI-Wash. 3/8" I.D. x 5/8" O.D.	1	87	710-0599	'	x .50" Lg.	
	44	710-0216	'	Hex Bolt 3/8-16 x 3/4" Lg.*		88	736-0242		Bell-Wash. 5/16" I.D.	
	45	14992	,	Depth Bar Ass'y. Hex Nut 5/16-18 Thd.*		89	736-0242		Fl-Wash. 5/8" I.D. (405)	
	46	712-0267		L-Wash. 5/16" I.D.*		90	710-0203		Self-Tap Scr. #10 x ½" Lg.	
١	47	736-0119	1	Hex Nut 5/16-18 Thd.*		91	746-0484		Tine Control Cable (402, 404)	
-	48	712-0267 736-0119		L-Wash. 5/16" I.D.*		31	746-0535	1	Tine Control Cable (405)	
	50	14975		Frame Rail—L.H.			, -0-000	1	Into Control Cable (400)	
	_30	149/3	000	Traine rain L.II.	1	<u> </u>				



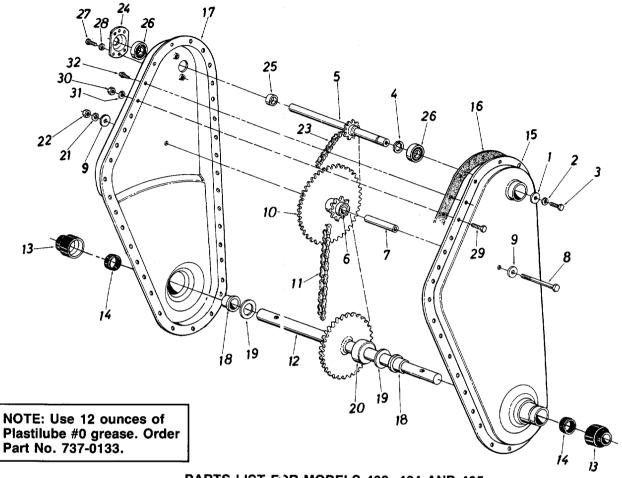
Models 402, 404 and 405

PARTS LIST FOR MODELS 402, 404 AND 405 ROTARY TILLERS

' 			PARIS LIST FOR MODELS						
REF NO		COLOR	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	746-0484		Clutch Control Cable		57	750-0442		Spacer 3/4" I.D. x 1.12" O.D.	
,	712 0107		(Wheels) Hex Cent. L-Nut ¼-20 Thd.		58	756-0396		x 1.56" Lg. ½" "V"-4L Pulley 3/4" I.D.	
2			Hex Cent. L-Nut 3/8-16 Thd.*		30	730-0390		x 2.59" O.D.	
4			Sq. Key 3/16" Dia. x .75		59	710-0117		Hex Bolt 5/16-24 x 1.0" Lg.	
5			Engine		60	736-0119		L-Wash. 5/16" I.D.*	
6			Hex Bolt 5/16-18 x 1.50" Lg.*		61	736-0343		Fl-Wash. 5/16" I.D. x 1.25"	
8 9			Hex Bolt 5/16-18 x .75" Lg.*		62	712-0116		O.D. (402, 404, 405) Hex L-Nut 3/8-24 Thd.	
8	711-0494		Spacer .51" I.D. x 3/4" O.D. x .39" Lg. (404, 405)		63	754-0195		"V"-Belt	
10	714-0131		Hi-Pro Key #5 Woodruff		64	756-0405		Fl-Idler Pulley 3.75" O.D. x	
11			Set Scr. 1/4-28 x .25" Lg.					3/8" I.D.	
12			Hex Bolt 5/16-18 x 3.0" Lg.*		65	736-0176		Fl-Wash25" I.D. x .93"	
13	14981		Chain Case Ass'y. Comp.— Tines		66	736-0329		O.D. x .120 L-Wash. ¼″ I.D.*	
14	14963		Chain Case Ass'y. Comp.—		67	710-0329		Hex Bolt 1/4-28 x .75" Lg.*	
'	14000		Wheels (404, 405)		68	756-0389		Split Pulley 6" Dia. x 5/8" I.D.	1
	784-0102		Chain Case Ass'y. Comp.—		69	714-0388		Hi-Pro Key	
			Wheels (402)		70	750-0472		Spacer	
16		638	Engine Mounting Plate		71	738-0183		Shld. Bolt 1/2" Dia. x .210" Lg.	
17			L-Wash. 5/16" I.D.*		72	712-0267		Hex Nut 5/16-18 Thd.*	İ
18			Hex Nut 5/16-18 Thd.* Hex Bolt 3/8-24 x 3.0" Lg.*		73 74	736-0119 14991	'[L-Wash. 5/16" I.D.*	
20			Frame Rail—L.H.		75	732-0445		Side Plate Ass'y. Ext. Spring .50" O.D. x 1.55"	
21			Counter Weight 35LBS		'	702 0110		Lg.	
22			Hex Bolt 1/2-13 x 4.0" Lg.*		76	14971	638	Idler Bracket Ass'y.—Tines	
23			FI-Wash. 1/2" I.D. x 1.0" O.D.		77	756-0387	'	Pulley 6" Dia. x 5/8" I.D.	
28			L-Wash. 1/2" I.D.*		78	710-0698		Hex Bolt 1/4-28 x 1.50" Lg.*	
29			Hex Nut ½-13 Thd.*		79	754-0109		"V"-Belt (404, 405)	
30	750-0579		Spacer 3/8" I.D. x 5/8" O.D. x 2.18" Lg.		80	754-0207 712-0117		"V"-Belt (402) Hex Cent. L-Nut 1/4-28 Thd.*	
31	736-0169		L-Wash. 3/8" I.D.*		81	756-0166		"V"-Idler Pulley 2-5/8" O.D.	
32			Hex Nut 3/8-24 Thd.*		82	756-0386	1	½" "V"-Pulley 2¼" O.D. x	
33	734-1129		Comp. Wheel Ass'y.—L.H.					.50" I.D.	
34			Frame Rail—R.H.		83	738-0147	1	Shld. Bolt 1/2" Dia. x .160"	
37			Comp. Wheel Ass'y.—R.H.		0.4	14000		Lg.	
38	741-0227		Flange Brg. 7/8" I.D. x 1.12" Lg.		84 85	14969 732-0445		Idler Bracket Ass'y—Wheels Ext. Spring .50" O.D. x 1.55"	•
39	748-0292		Ratchet Wheel		0.5	732-0443	'	Lg. (404, 405)	
	10622		Nylon Spring			732-0444	.	Ext. Spring .50" O.D. x 1.97"	
41	748-0291		Pawl .44" I.D.					Lg. (402)	
42			Wheel Cover		86	712-0287		Hex Nut 1/4-20 Thd.*	
43			Hex Bolt 5/16-18 x 1.25" Lg.*		87	736-0270	1	Bell-Wash. 1/4" I.D.	
44			Special Hex Nut 5/16-24 Thd. Cotter Pin 1/8" Dia. x 1.25"*		88	15399 732-0387	,	Belt Keeper Ass'y. Ext. Spring	
46	1		FI-Wash. 7/8" I.D. x 1-3/8"		90	710-0118		Hex Bolt 5/16-18 x .75" * (405)	
	700 0214		O.D. x .06		91	15093		Clutch Cable Brkt. (405)	
48	710-0600		Hex Wash. Self-Tap Scr.		92	736-0119		Lock Washer 5/16" I.D.* (405)	
			5/16-24 x .50" Lg.		93	712-0267		Hex Nut 5/16-18 Thd.* (405)	
49	750-0470		Spacer 5/16" I.D. x 16 Ga.		94	747-0507		Belt Keeper	ŀ
52	14980	630	x .96" Lg. Belt Cover		95	710-0106		Hex Bolt 1/4-20 x 1.25" Lg.* (402)	
53		638	Hex Wash. S-Tap Scr. 1/4-20		96	710-0237		Hex Bolt 5/16-24 x .62" Lg.*	
	, , , , , , , , , , , , ,		x .50" Lg.		"	, 10 0207		(402)	
54	710-0653		Hex Wash. S-Tap Scr. 1/4-20		97	736-0242		Bell-Wash. 5/16" I.D. (405)	
1			x 3/8" Lg.		98	746-0484		Clutch Control Cable (Tinés)	
55	1		Bell-Wash. 1/4" I.D.			740 0505		(402, 404)	
56	750-0219		Spacer 3/8" I.D. x ½" O.D. x 2.0" Lg.			746-0535		Clutch Control Cable (Tines)	
	1		л 2.0 Ly.	<u> </u>	<u> </u>		<u></u>	(405)	

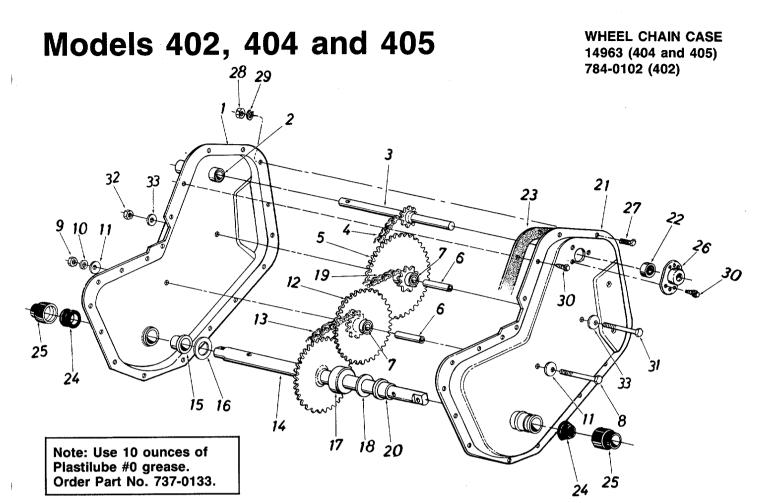
TINE CHAIN CASE 14981

Models 402, 404 and 405



PARTS LIST FOR MODELS 402, 404 AND 405 TILLER CHAIN CASE 14981 (TINES)

			TILLER OIL			11001 (111		· · · · · · · · · · · · · · · · · · ·	
REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	736-0176		Fl-Wash. 1/4" I.D. x .93" O.[).		17	14985		Ass'y. Tiller Housing-L.H.	
			x .120		18	731-0374		Flange Brg. 1.00" I.D.	
2	736-0329	-	L-Wash. 1/4" I.D.*		19	736-0163		FI-Thrust Wash. 1.0" I.D. x	
3	710-0513		Hex Bolt 1/4-28 x .62" Lg.		1			.03 Thk.	
			w/Patch		20	750-0570	1	Step Spacer	{
4	716-0131		External Snap Ring—5/8"		21	736-0169		L-Wash. 3/8" I.D.*	
			Dia.		22	712-0711		Hex Nut 3/8-24 Thd.*	
5	04956		Input Shaft Ass'y.		23	713-0327		#35 Chain 3/8" Pitch x 52	
6	741-0304		Bearing 5/8" I.D. x 3/4" O.D					Links Endless	
			x 1.860" Lg.		24	05034		Bearing Housing 1.38" I.D.	
7	750-0275		Sprocket Hub Tubing 3/8"]	25	750-0471		Spacer	
			I.D. x 5/8" O.D. x 1.90		26	741-0155		Ball Bearing .625" I.D. x	
8	710-0629	1	Hex Bolt 3/8-24 x 2.75" Lg.		•			1.38" O.D. x .437	ļ
9	736-0258		FI-Wash. 3/8" I.D. x 1.25" O.D. x .10		27	710-0599		Hex Wash. SF-Tap Scr. ¼-20 x .50" Lg.	
10	713-0331	1	Sprocket Ass'y.		28	736-0329		L-Wash. ¼" I.D.*	
11	713-0328		#50 Chain 5/8" Pitch x 46		29	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	
			Links Endless		30	712-0267		Hex Nut 5/16-18 Thd.*	
12	14986		Tine Shaft Ass'y.		31	736-0119		L-Wash. 5/16" I.D.*	
13	731-0487		Dust Cup		32	710-0599		Hex Wash. SF-Tap Scr. ¼-20	
14	721-0175		Seal Ring Single Lip,					x .50" Lg.	
			Springless		—	737-0133		Grease—Plastilube #0	1
15	14984		Ass'y. Tiller Housing—R.H.]				(12 oz.)	
16	721-0170		Gasket				L		



PARTS LIST FOR MODELS 402, 404 AND 405 TILLER CHAIN CASE (WHEELS)

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART		PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	14962		Chain Case Half Ass'y.—R.H.		18	736-0265		Fl-Wash88" I.D. x 1.50"	
2	748-0154		Bearing 5/8" I.D. x .813"					O.D. x .03	
			O.D. x 1.31" Lg.		19	713-0267		#420 Chain 1/2" Pitch x 30	
3	14960		Input Shaft Ass'y.					Links Endless	
4	713-0325		Chain #35—3/8" Pitch x 44		20	741-0227		Flange Bearing	
			Links		21	15797		Chain Case Half Ass'y.—L.H.	
5	713-0316		Sprocket and Hub Ass'y.		22	741-0155		Bearing	
6	750-0351		Bearing Inner Axle		23	721-0156		Gasket	
7	741-0228		Sleeve Brg. 5/8" I.D. x 3/4"		24	721-0157		Seal	
			O.D. x 1.50		25	731-0486		Dust Cup	
8	710-0369		Hex Bolt 3/8-24 x 2.50" Lg.*		26	05034		Bearing Housing	
9	712-0116		Hex Ins. L-Nut 3/8-24 Thd.		27	710-0195		Hex Bolt 1/4-28 x 5/8" Lg.	
10	736-0169		L-Wash. 3/8" I.D.*		28	712-0138		Hex Nut 1/4-28 Thd.	
11	736-0219		Bell-Wash41" I.D. x 1.13"		29	736-0329		L-Wash. 1/4" I.D.*	
			O.D. x .03		30	710-0599		Hex Wash. S-Tap Scr. 1/4-20	
12	713-0330		Sprocket & Hub Ass'y. 9T-22T					x .50" Lg.	
13	713-0326		#420 Chain 1/2 Pitch x 28		31	710-0378		Hex Bolt 5/16-18 x 2.5" Lg.	
			Links Endless		32	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
14	14968		Wheel Shaft Ass'y. (404, 405)	ŀ	33	736-0159		FI-Wash. 5/16" I.D.	
	784-0095		Wheel Shaft Ass'y. (402)	ŀ	—	737-0133		Grease—Plastilube #0	
15	741-0227		Flange Bearing					(10 oz.)	
16	736-0265		FI-Wash88" I.D. x 1.5"	ĺ	—	14963		Chain Case Ass'y. Comp.	
			O.D. x .03					(404, 405)	
17	750-0354		Spacer 7/8" I.D. x 13/4" O.D.		—	784-0102		Chain Case Ass'y. Comp.	
	1		x .68" Lg.					(402)	

^{*}For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

Heavy Duty Rear Tine Garden Tiller Attachments Available for All-Season Use

31-0110 8" Furrower Opener
31-0144 "V"-Bar Cultivating Kit (Must be used with 31-0178 adapter) Kit Includes:
"V" Bar Frame, 4-Point Cultivating Tines, Hiller/Furrower, Depth Gauge Whe els (Pair).

31-0145 Depth Stake Cultivating Kit (Must be used with 31-0178 adapter) Kit Includes: 8" Furrower Opener, 15" Swe∋p Cultivator, 32" Leveling Rake, Extr₃ Depth Stake.

31-0178 Adapter

To use these attachments on the tiller, it is necessary to:

1. Remove the tine shield flap assembly.

2. Remove the depth bar assembly (except when using the 8" furrower opener).

Note: Attachments are available through your local dealer or from the factory: Agri-Fab Inc., 303 W. Raymond Street, Sullivan, Illinois 61951 (217) 728-4334.

PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service are available through the authorized service firm: listed below. All orders should specify the model number of your unit, part numbers, description of parts and the quantity of each part recuired.

BRIGGS AND STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing Engines—Gasoline, Briggs & Stratton or Tecumseh Lauson.

NOTE: If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

ALABAMA Auto Electric & Carburetor Co. ARKANSAS Sutton's Lawn Mower Shop	BIRMINGHAM . 2625 4th Ave. S 35233 NORTH LITTLE ROCK
CALIFORNIA Billious COLORADO	Box 368, Rt. 4
Spitzer Industrial Products Co. FLORIDA Radco Distributors	. 6601 N.
Small Eng. Dist	Box 545932207 HIALEAH 7995 W 26th Court 32016
Keen Edge Co	EAST POINT 2834 Church St 3(344 LYONS 8615 Ogden Ave 6(534 ELKHART
Power Lawn & Garden Equip	ELKHART 2101 Industrial Pkwy
Center Supply Co	TAKOMA PARK . 6867 New Hampshire
MASSACHUSETTS Morton B. Collins Co MICHIGAN Power Equipment Dist	SPRINGFIELD 300 Birnie Ave. .01107 MOUNT CLEMENS 340 Hubbard .48)43
Hance Distributing Inc MISSOURI	PLYMOUTH . 12795 16th Ave. North .55 141 EARTH CITY . 4159 Shoreline Dr63)45
Automotive Equip. Service NEW JERSEY Piersons	KANSAS CITY . 3117 Holmes St 64 09 ALLOWAY Canal St. Roy 404
NEW MEXICO Spitzer Eng. & Parts Co.	ALBUQUERQUE 1023 Third Ave. N.W 87 03

NEW YORK	CARTHAGE
Gamble Dist., Inc.	West End Ave 13610
NORTH CAROLINA	GREENSBODO
Dixie Sales Company	335 N. Green
ОНЮ	CARROLL
Stebe's Mid-State Mower Supp	ly Box 366, 71 High St 43112
Bleckrie, Inc	CLEVELAND 7900 Lorain Ave
	WADSWORTH
National Central	687 Seville Rd44281
	YOUNGSTOWN
Burton Supply Co	1301 Logan Ave.
DENINOVANA	Box 929 44501
PENNSYLVANIA	HARRISBURG
	+02 i N. Oui St [/][[0
Thompson Dukkan O	WILLOW GROVE
mompson Rubber Co	850 Davisville Rd 19090
Bluemont Co	PITTSBURGH . 11101 Frankstown Rd15235
Biddinont Od	PUNXSUTAWNEY
Frank Roberts & Sons	R.D. 2
Traini Flobotto di Gollo	SCRANTON
Scranton Auto Ignition Co	SCRANTON . 1133-35 Wyoming Ave 18509
TENNESSEE	KNOXVILLE
Ace Distributors	KNOXVILLE 2103 Magnolia
	MEMPHIS
American Sales & Service, Inc.	3035-43 Bellbrook 38116
TEXAS	DALLAS 423 E. Jefferson75203
Marr Brothers, Inc	. 423 E. Jefferson 75203
	SAN ANTONIO
Engine House Inc	. 8610 Botts Lane
HTAN	P.O. Box 17867 78217
UTAH	SALT LAKE CITY
VIRGINIA	1661 N. Beck St 84116
DDI Corp	ASHLAND
WASHINGTON	. 101 Cedar Ridge Dr 23005
Fauin Northwest	SEATTLE . 1410 14th Ave98122
WISCONSIN	MILWAUKEE
	. 4727 N. Teutonia St 53209
and a second sec	. 7/2/ N. Teutonia St 53209

WARRANTY FARTS AND SERVICE POLICY

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fau t, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:

- 1. Replacement of Missing Parts on new equipment.
- 2. Replacement of Defective Parts within the warranty period.
- 3. Repair of Defects within the warranty period.

All claims MUST be substantiated with the following information:

- 1. Model Number, Serial Number and/or Data Code of unit involved.
- 2. Date unit was purchased or first put into service.
- 3. Date of Failure.
- 4. Nature of Failure.